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Hsieh

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(54) **LAMPSHADE ASSEMBLY**

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(52) **U.S. Cl.** **362/362**; 362/351; 362/249; 362/84
(58) **Field of Search** 362/84, 351, 355, 362/360, 361, 294, 345, 346, 347

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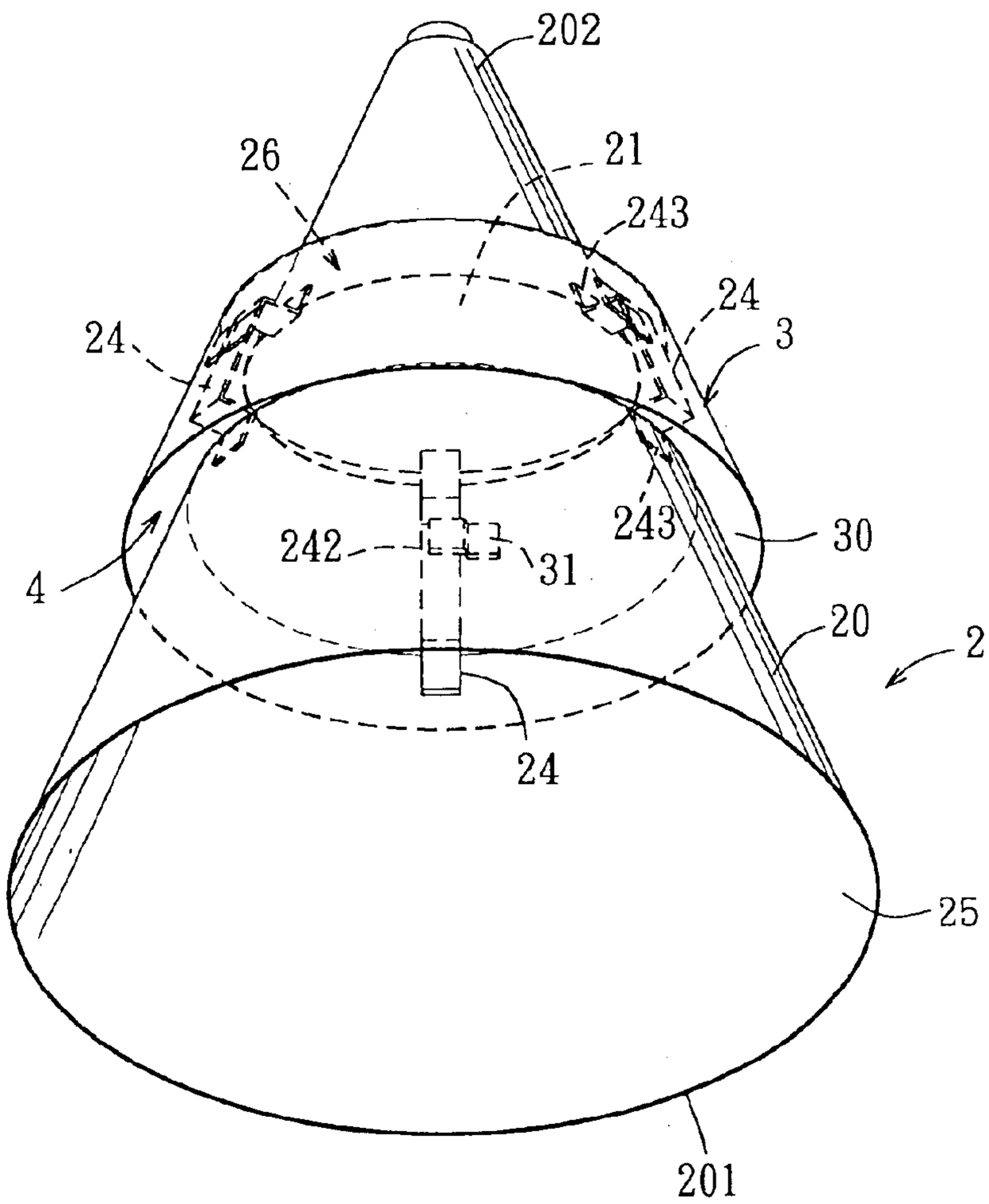
(57) **ABSTRACT**

A lampshade assembly that includes a main cover body and a reflector shroud. The main cover body is formed with a light emanating portion that defines at least one opening. The reflector shroud is mounted on the cover body, and is disposed surroundingly about and is spaced apart from the light emanating portion to define a heat dissipating space. The lampshade assembly further includes a mounting unit attached to the cover body to hold the shroud.

11 Claims, 8 Drawing Sheets



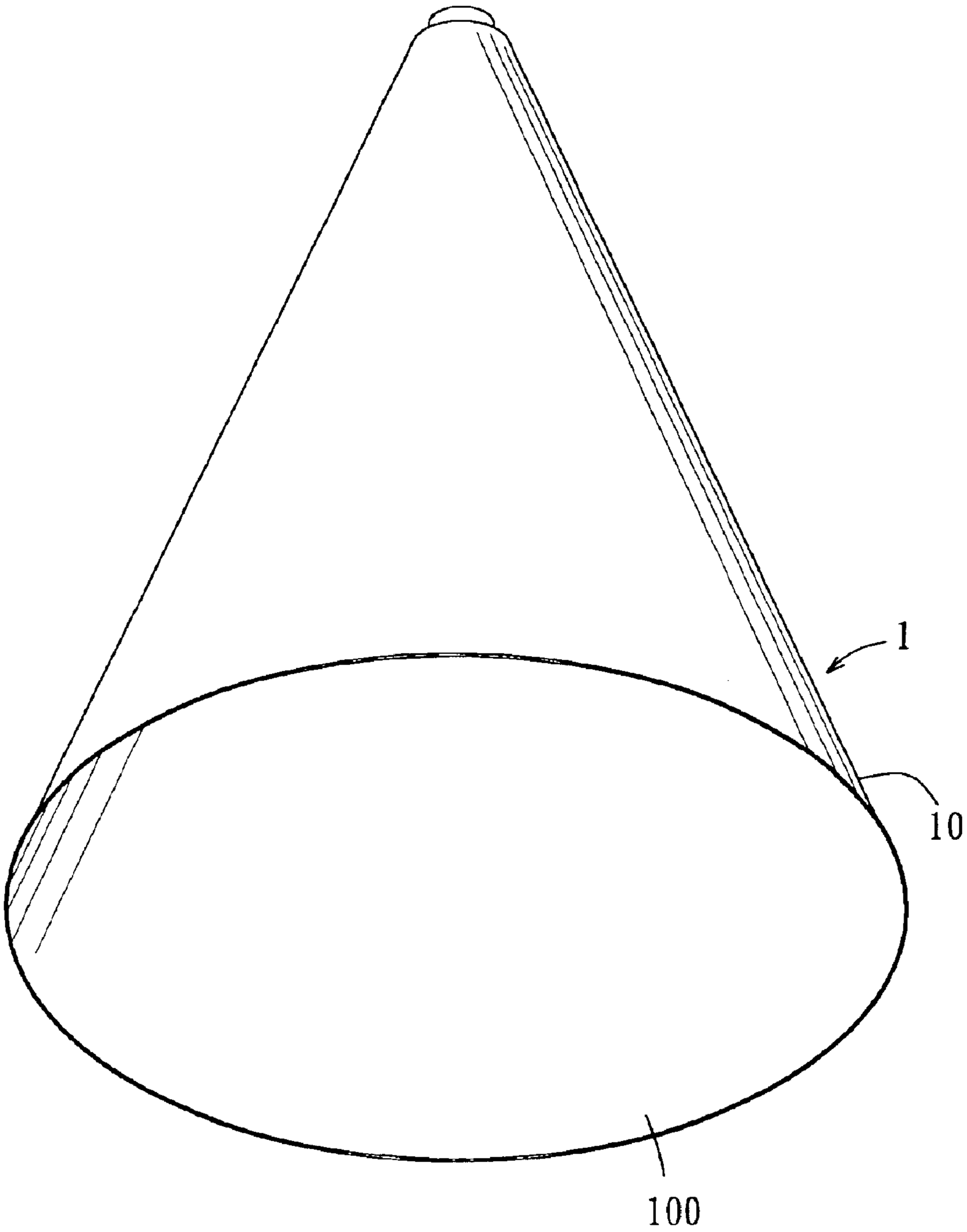


FIG. 1
PRIOR ART

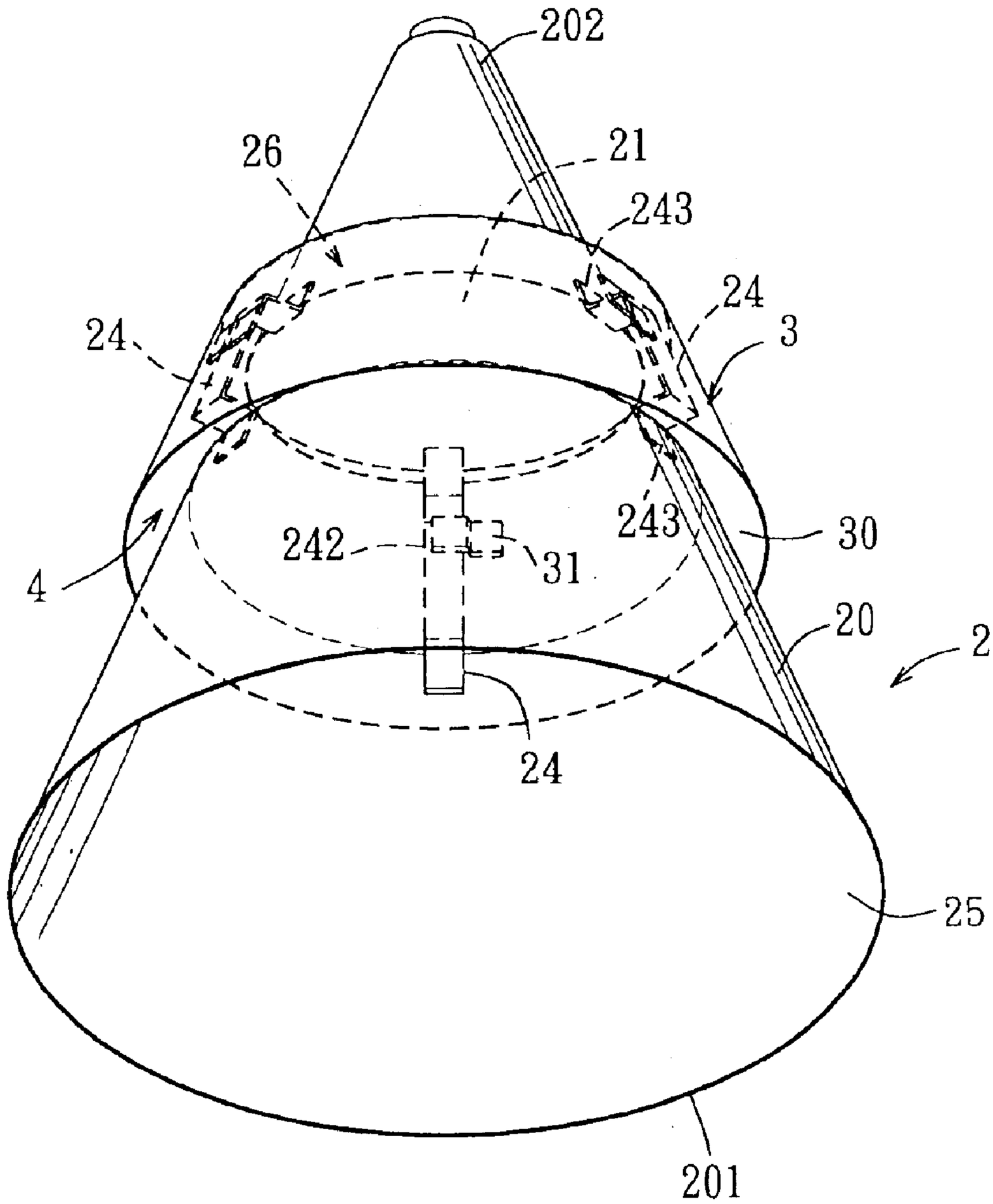


FIG. 2

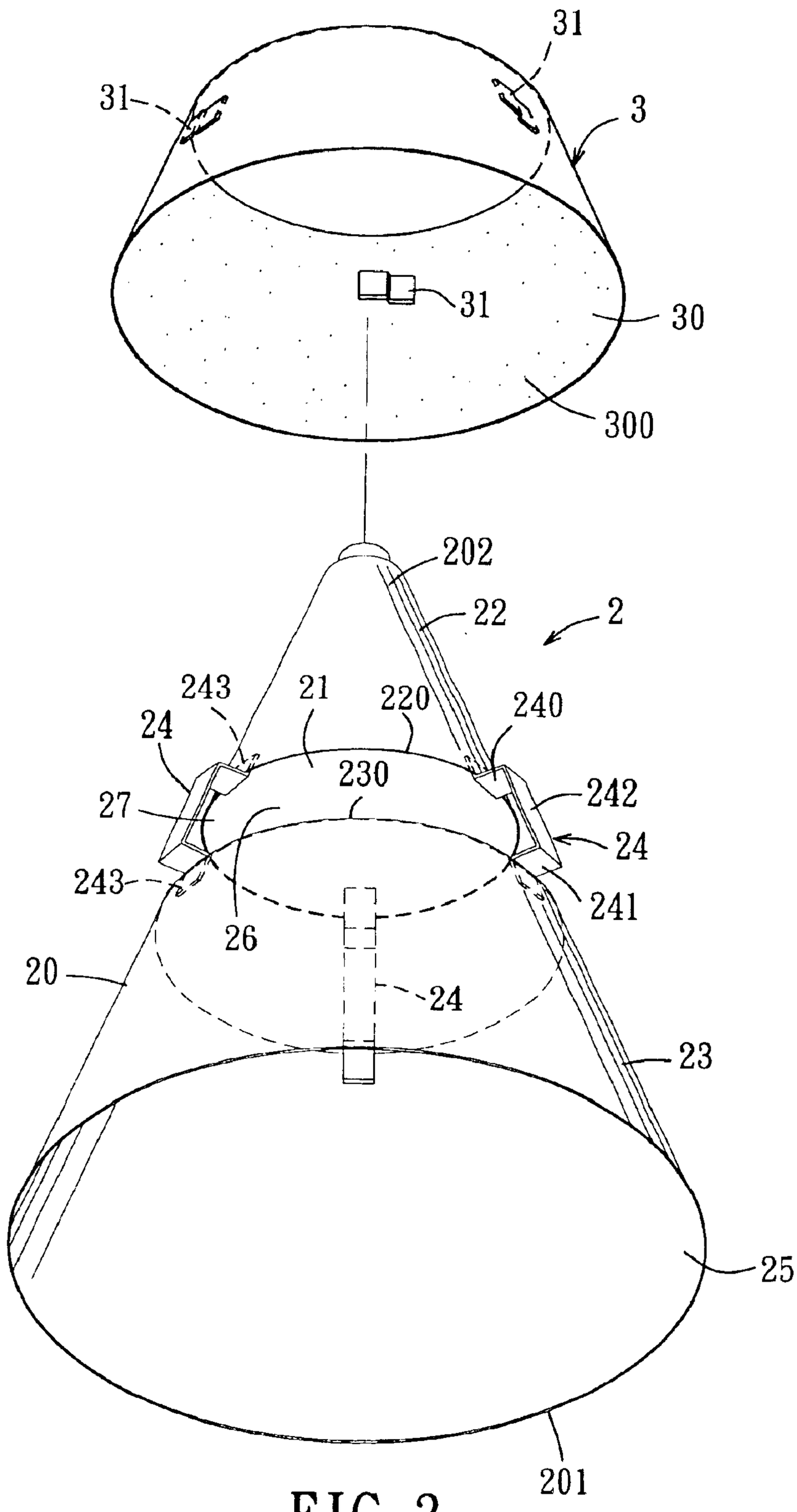

31
31
3
31
30
300
202
22
2
243
21
220
240
24
230
27
242
24
243
241
26
20
24
23
25
201

FIG. 3

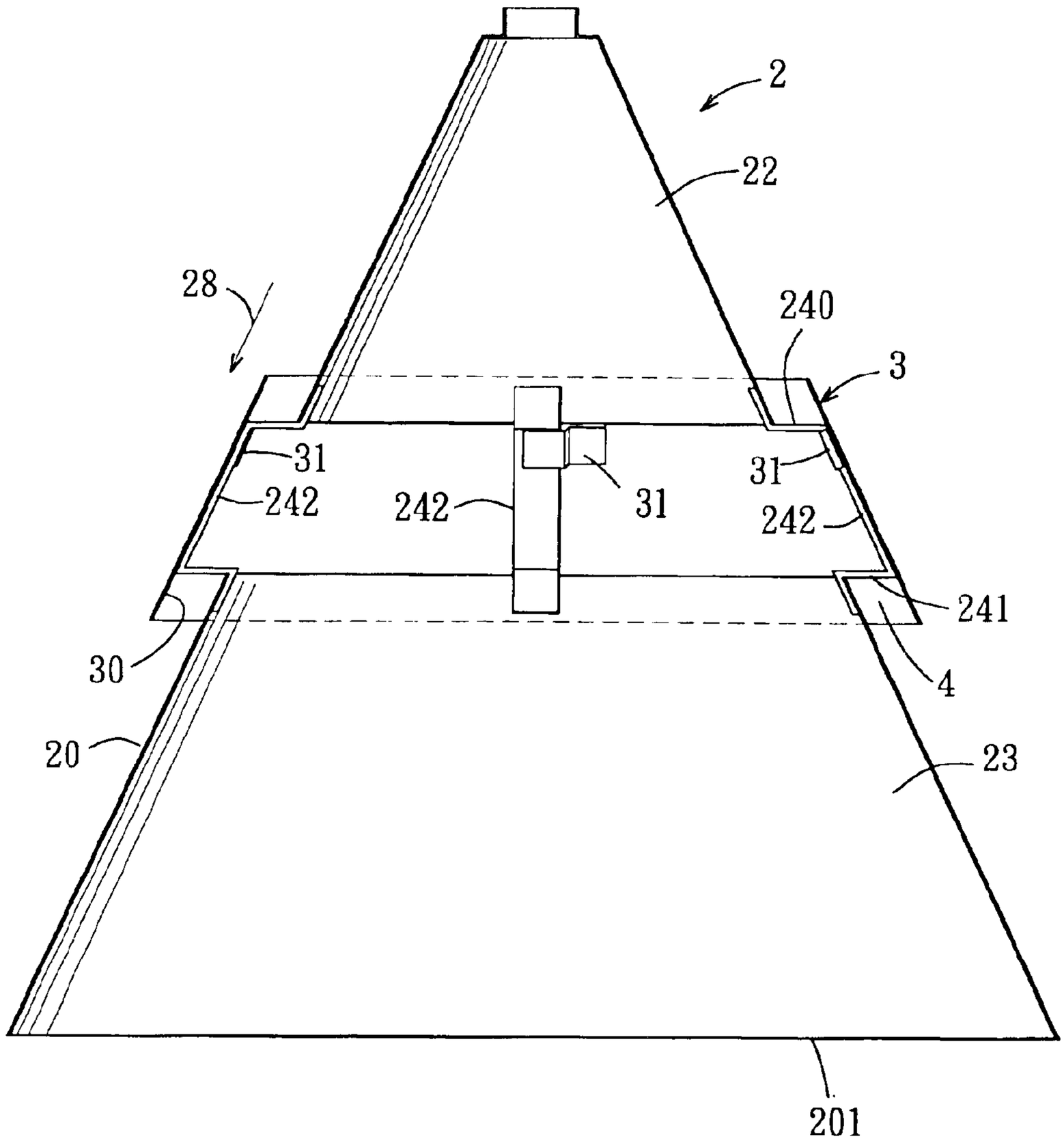


FIG. 4

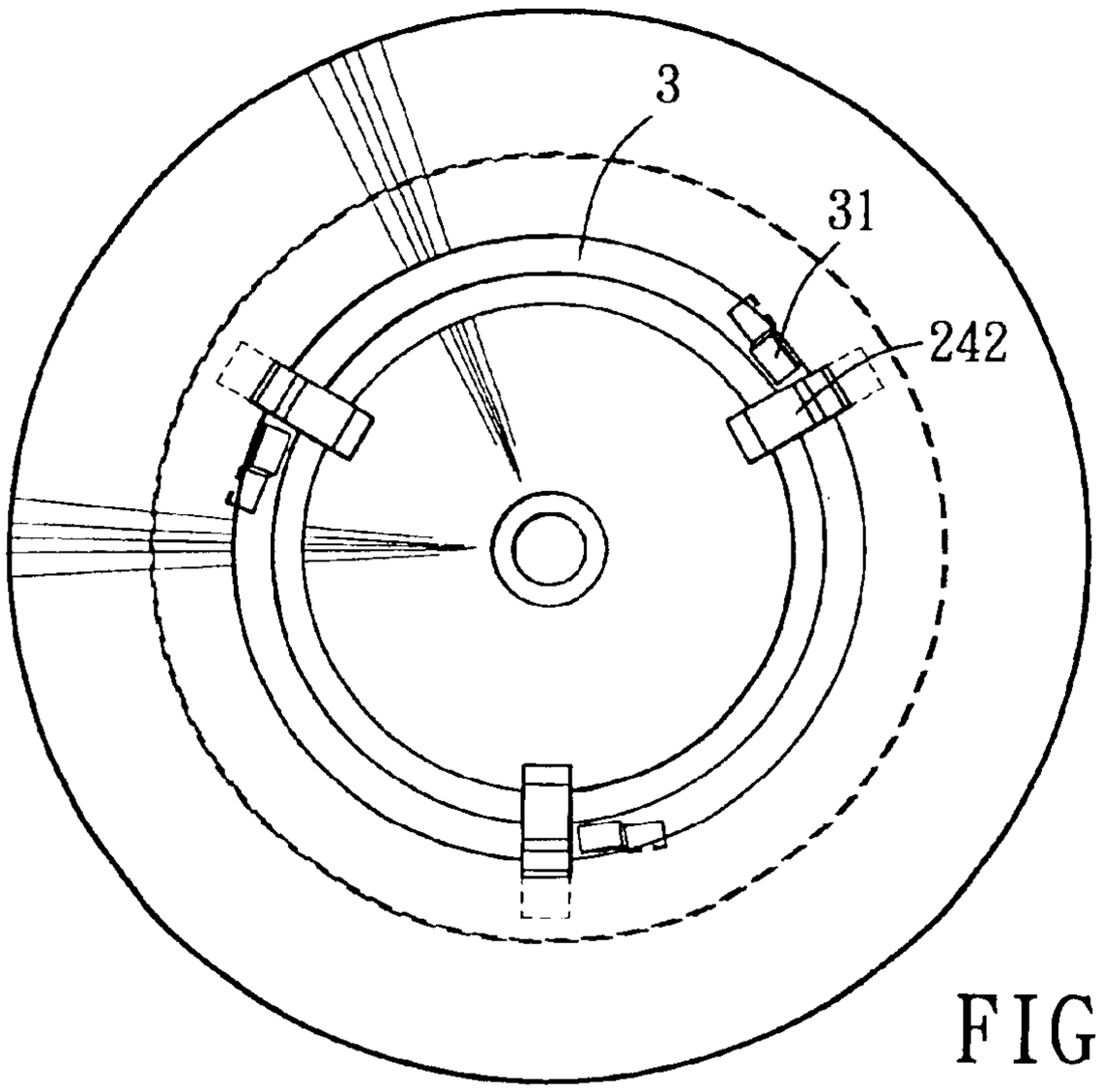


FIG. 5

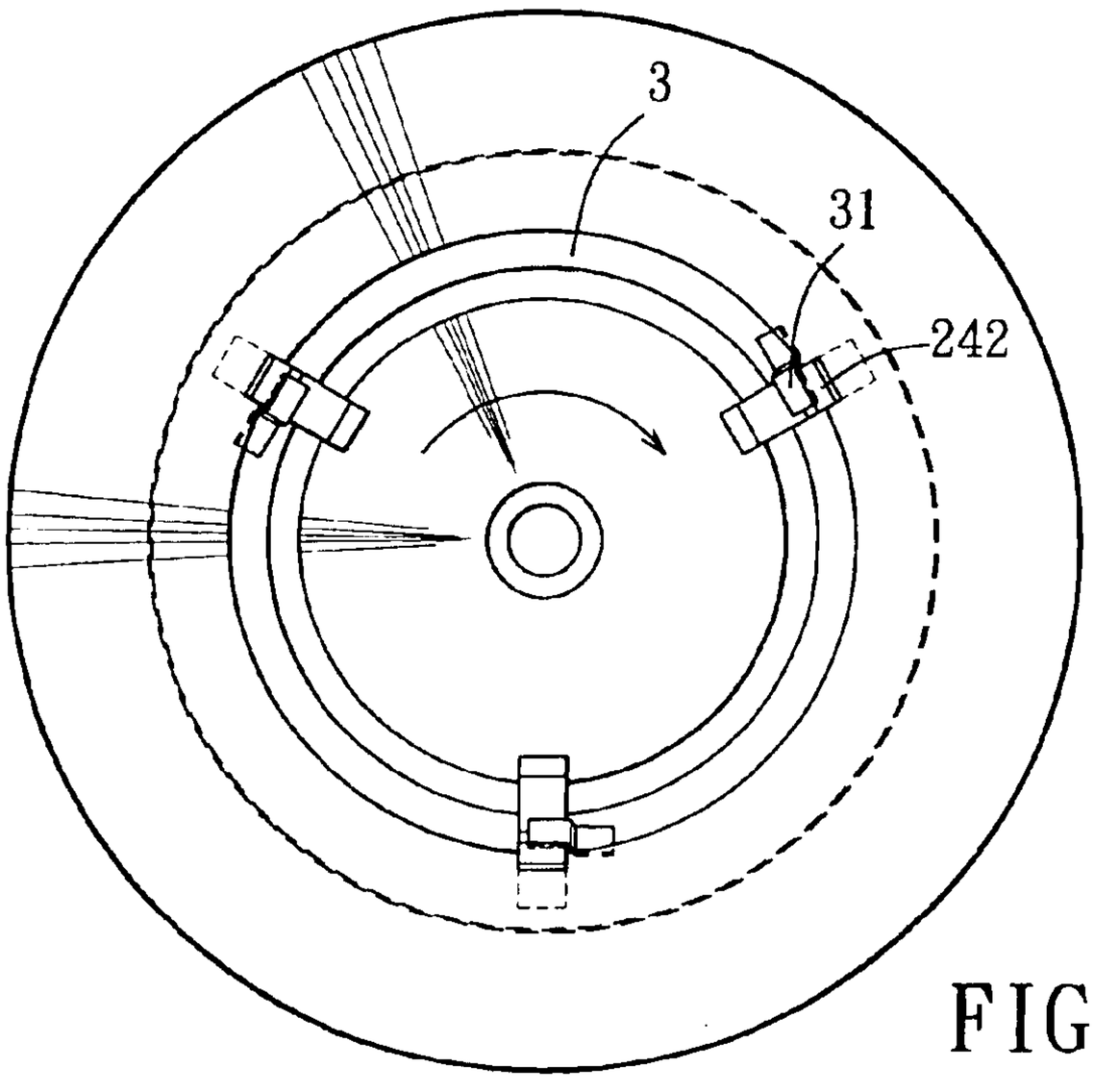


FIG. 6

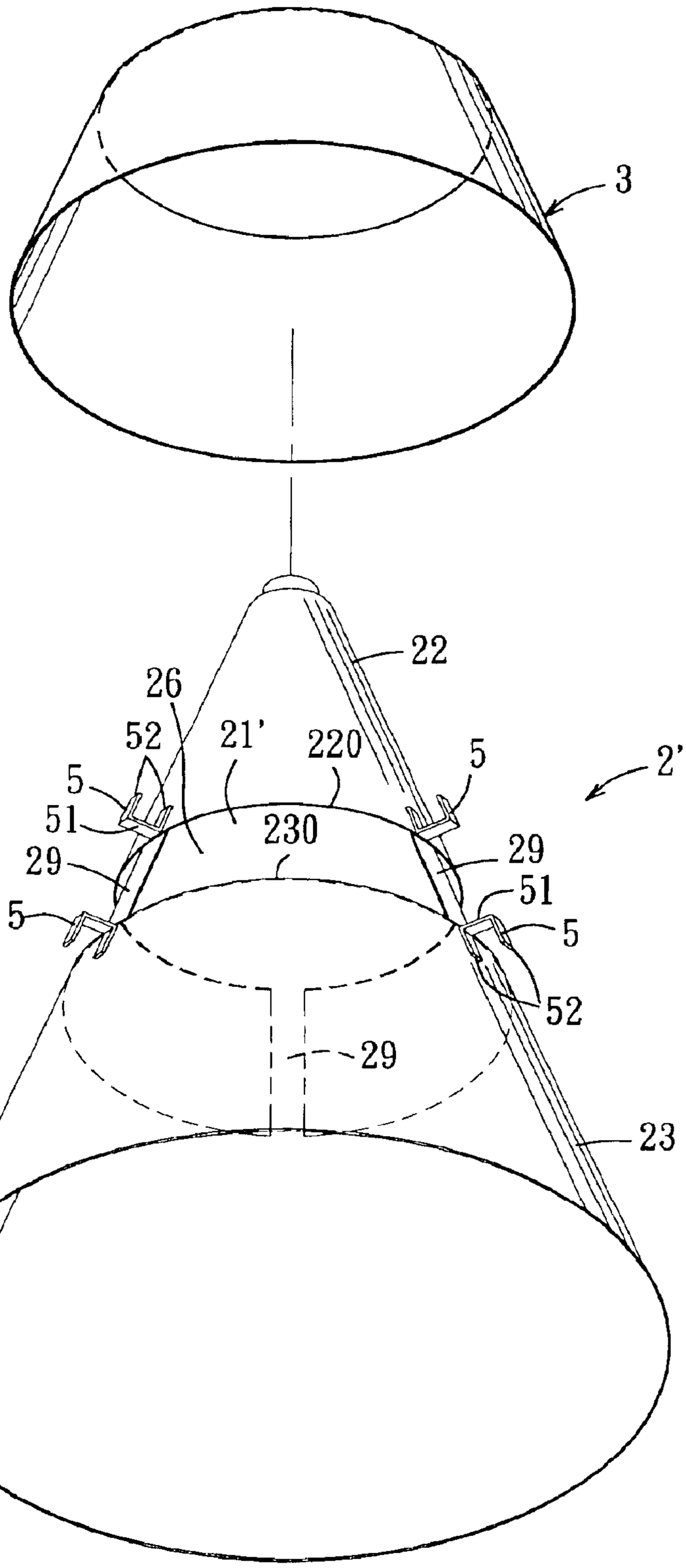


FIG. 7

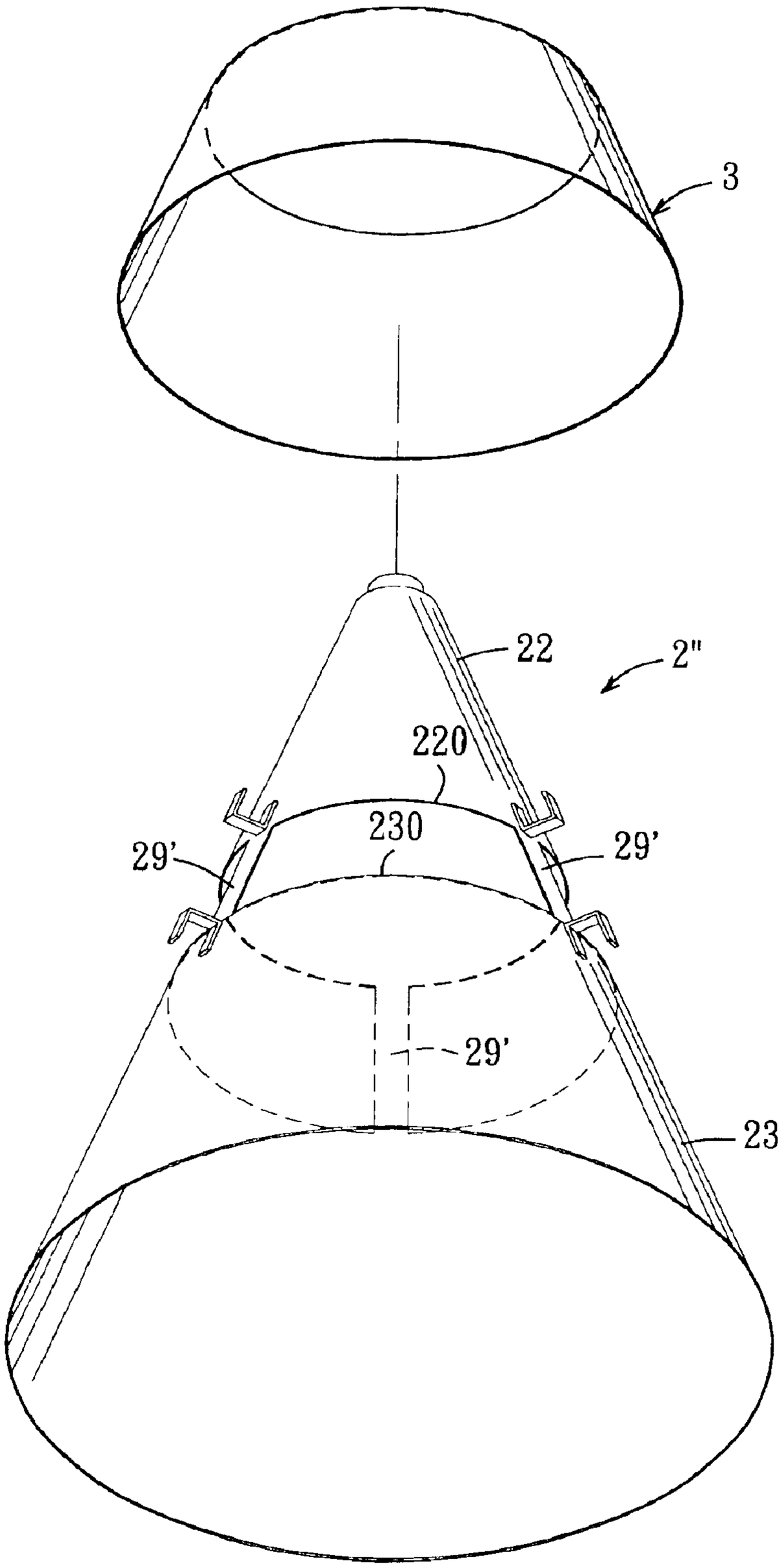


FIG. 8

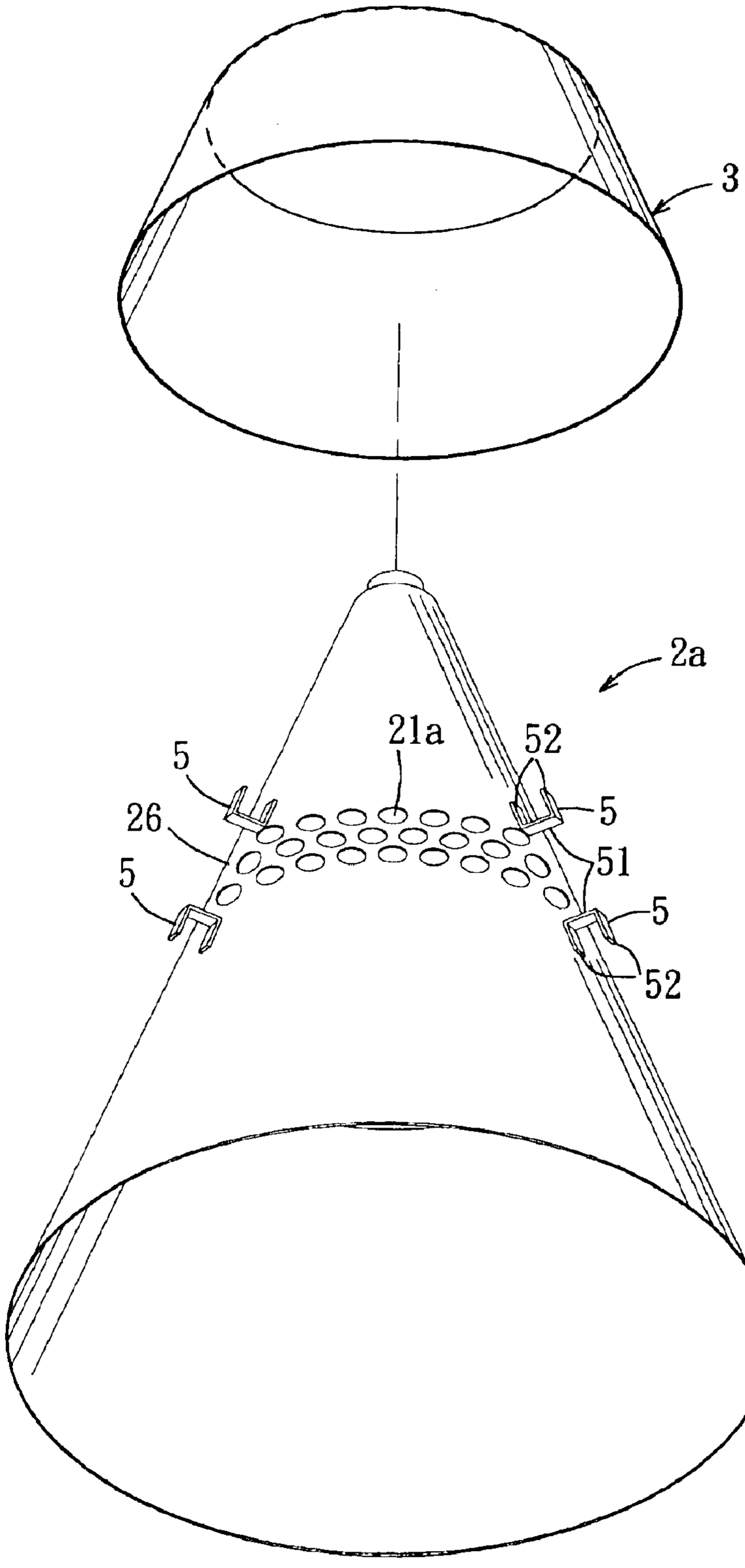


FIG. 9

LAMPSHADE ASSEMBLY

BACKGROUND OF THE INVENTION

1. Field of the Invention

The invention relates to a lampshade assembly, more particularly to a lampshade assembly, which has a light emanating portion and a shroud covering the light emanating portion.

2. Description of the Related Art

A conventional lampshade **1** is shown in FIG. **1**. The lampshade **1** has a cover body **10** with an open end **100**. The lampshade **1** is applicable on a table lamp, a ceiling lamp, a wall lamp or a floor lamp. The cover body **10** is made of a non-transparent material so as to produce a gentle light output. However, the conventional lampshade **1** has, at least the following disadvantages:

1. Since light rays can emanate only from a forward end and a backward end of the lampshade **1**, brightness is limited;
2. Heat of a light bulb is dissipated only through the open end **100** such that the heat dissipation effect is limited; and,
3. The color of the light produced from the lampshade **1** is attributed solely to the light bulb per se and cannot be altered and diversified.

SUMMARY OF THE INVENTION

Therefore, an object of the present invention is to provide a lampshade assembly that can dissipate heat effectively and that can add color to the monotonous light output of a light bulb mounted thereinside.

According to this invention, the lampshade assembly comprises a main cover body and a reflector shroud. The main cover body surrounds a receiving space, and is formed with a light emanating portion. The light emanating portion defines at least one opening. The reflector shroud is mounted on the cover body, and is disposed surroundingly about and is spaced apart from the light emanating portion to define a heat dissipating space.

BRIEF DESCRIPTION OF THE DRAWINGS

Other features and advantages of the present invention will become apparent in the following detailed is description of the preferred embodiments with reference to the accompanying drawings, of which:

FIG. **1** is a perspective view of a conventional lampshade;

FIG. **2** is a perspective view of the first preferred embodiment of a lampshade assembly according to the present invention;

FIG. **3** is a partial exploded perspective view of a first preferred embodiment, illustrating a main cover body and a reflector shroud;

FIG. **4** is a schematic view of the first preferred embodiment in an assembled state;

FIG. **5** is a schematic view of the first preferred embodiment, illustrating the reflector shroud prior to engagement with the cover body;

FIG. **6** is a schematic view of the first preferred embodiment, illustrating the reflector shroud after engagement with the cover body;

FIG. **7** is an exploded perspective view of a second preferred embodiment of a lampshade assembly according to the present invention;

FIG. **8** is an exploded perspective view of a third preferred embodiment of a lampshade assembly according to the present invention; and

FIG. **9** is an exploded perspective view of a fourth preferred embodiment of a lampshade assembly according to the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Before the present invention is described in greater detail, it should be noted that like elements are denoted by the same reference numerals throughout the disclosure.

Referring to FIGS. **2** to **6**, the first preferred embodiment of a lampshade assembly according to the present invention is shown to comprise a main cover body **2**, a mounting unit, and a reflector shroud **3**.

The main cover body **2** surrounds a receiving space **25**, and is formed with a light emanating portion **26**. The cover body **2** has a cone-shaped wall **20** which includes a converging end **202**, a diverging end **201**, and an intermediate portion between the converging and diverging ends **202**, **201**. The light emanating portion **26** is disposed in the intermediate portion of the wall **20**. The cover body **2** has a substantially cone-shaped first section **22** adjacent to the converging end **202**, and a truncated cone-shaped second section **23** adjacent to the diverging end **201** and spaced apart from the first section **22**. The light emanating portion **26** is defined by an opening **21** between the first and second sections **22**, **23**. Thus, the opening **21** is substantially ring-shaped.

The mounting unit is attached to the cover body **2** to hold the shroud **3**, and includes three mounting elements **24**, each of which has an inner end secured to the cover body **2** and extends outwardly from the inner end to connect with the shroud **3**. Specifically, each mounting element **24** includes a U-shaped member which has a bight portion **242** extending across the opening **21**, two opposed arms **240**, **241** extending respectively and inwardly from two ends of the bight portion **242**, and two end flanges **243** extending respectively from the arms **240**, **241** in opposite directions away from the arms **240**, **241**. The flanges **243** are secured respectively to the peripheral ends **220**, **230** of the first and second sections **22**, **23** proximate to the opening **21** by a welding process. The bight portion **242** is spaced apart from the light emanating portion **26** by a suitable gap **27**, and is generally parallel to the wall **20** of the cover body **2**, as shown by the arrow **28** in FIG. **4**.

The reflector shroud **3** is mounted on the cover body **2** using the mounting elements **24**, and is disposed surroundingly about and spaced apart from the light emanating portion **26** to define a heat dissipating space **4** (see FIG. **4**). The shroud **3** has a truncated cone-shape, and has an inner surface **30** formed with three positioning hooks **31** that engage the respective bight portions **242** of the mounting elements **24**. Generally, the number of the positioning hooks **31** corresponds to the number of the bight portions **242** of the mounting elements **24**. The positioning hooks **31** engage the respective bight portions **242** of the mounting elements **24** by rotating the shroud **3** relative to the cover body **2**, as shown in FIGS. **5** and **6**, so that the shroud **3** is positioned on the cover body **2** (see FIGS. **2** and **4**), thereby forming the heat dissipating space **4** between the inner surface **30** of the shroud **3** and the light emanating portion **26** of the cover body **2**.

When light rays are produced from a light bulb (not shown) in the cover body **2**, the light rays not only radiate

from the diverging end **201** of the cover body **2**, but also from the light emanating portion **26** and the heat dissipating space **4**. The light emanating portion **26** can dissipate heat generated by the light bulb through the heat dissipating space **4**, thereby enhancing the heat dissipating effect of the lampshade assembly of the present invention.

On the other hand, the inner surface **30** of the shroud **3** may be coated with a heat-resistant pigment layer, or heat-resistant fluorescent pigment layer **300**. The color of the light bulb may be yellowish or white. When the light rays from the light bulb emanate from the opening **21**, the color thereof is altered as it is mixed with the color of the heat resistant pigment layer or the heat resistant fluorescent pigment layer **300**. When the mixed colors of the light are reflected and redirected outward by the shroud **3**, amore pleasant color effect is produced.

FIG. **7** illustrates the second preferred embodiment of a lampshade assembly according to the present invention, which is substantially similar to the first preferred embodiment. However, in this embodiment, the main cover body **2'** further includes three spaced-apart strips **29** connected to and cooperating with the peripheral ends **220**, **230** of the first and second sections **22**, **23** to define three annularly spaced-apart openings **21'** in the light emanating portion **26** of the cover body **2'**. The inner surface **30** of the shroud **3** is not formed with positioning hooks in this embodiment. Each of the mounting elements includes a U-shaped member **5** secured to the peripheral end **220**, **230** of one of the first and second sections **22**, **23**. The U-shaped member **5** has a bight portion **51** and two opposite arms **52** projecting from the bight portion **51**. One of the arms **52** is secured to one of the first and second sections **22**, **23**, whereas the other one of the arms **52** is connected to the inner surface **30** of the shroud **3** by a welding process so as to position the shroud **3** on the main cover body **2'**. The main cover body **2'** has a similar effect as that of the cover body **2** of the first preferred embodiment shown in FIG. **2**.

Referring to FIG. **8**, the third preferred embodiment of a lampshade assembly according to the present invention is shown and is substantially similar to the second preferred embodiment. However, in this embodiment, the strips **29'** are integrally formed with the peripheral ends **220**, **230** of the first and second sections **22**, **23** of the main cover body **2"**.

Referring to FIG. **9**, the fourth preferred embodiment of a lampshade assembly according to the present invention is shown and is substantially similar to the third preferred embodiment. However, in this embodiment, the main cover body **2***a* is a one-piece body. The light emanating portion **26** includes a plurality of openings **21***a*. Each of the mounting elements includes a pair of spaced-apart U-shaped members **5** secured to the light emanating portion **26**. Each U-shaped member **5** has a bight portion **51** and two opposite arms **52** projecting from the bight portion **51**. One of the arms **52** is secured to the light emanating portion **26**, whereas the other one of the arms **52** is connected to the shroud **3**. The advantages of the first preferred embodiment can be similarly attained by the fourth preferred embodiment.

While the present invention has been described in connection with what is considered the most practical and preferred embodiments, it is understood that this invention is not limited to the disclosed embodiments but is intended to cover various arrangements included within the spirit and scope of the broadest interpretation so as to encompass all such modifications and equivalent arrangements.

I claim:

1. A lampshade assembly comprising:

a main cover body surrounding a receiving space and formed with a light emanating portion, said light emanating portion defining at least one opening; and a reflector shroud mounted on said cover body, said shroud being disposed surroundingly about and being spaced apart from said light emanating portion to define a heat dissipating space,

said main cover body having a cone-shaped wall which includes a converging end, a diverging end, and an intermediate portion, said light emanating portion being disposed in said intermediate portion.

2. The lampshade assembly as claimed in claim **1**, further comprising a mounting unit attached to said cover body to hold said shroud, said mounting unit including a plurality of mounting elements, each of which has an inner end secured to said cover body and extends outwardly from said inner end to connect with said shroud.

3. The lampshade as claimed in claim **2**, wherein said cover body has a substantially cone-shaped first section, and a truncated cone-shaped second section which is spaced apart from said first section, said opening being disposed between said first and second sections.

4. The lampshade as claimed in claim **3**, wherein each of said mounting elements includes a U-shaped member which has a bight portion extending across said opening, and two opposed arms extending respectively and inwardly from two ends of said bight portion, said arms being secured respectively to said first and second sections.

5. The lampshade as claimed in claim **4**, wherein said shroud has a truncated cone-shape and has an inner surface formed with a positioning hook to engage said bight portion.

6. The lampshade as claimed in claim **3**, wherein said main cover body further includes a plurality of spaced-apart strips which extend across said opening.

7. The lampshade assembly as claimed in claim **6**, wherein each of said mounting elements includes a U-shaped member secured to each of said first and second sections proximate to said opening, said U-shaped member having a bight portion and two opposite arms projecting from said bight portion, one of said arms being secured to one of said first and second sections, the other one of said arms being connected to said shroud.

8. The lampshade assembly as claimed in claim **2**, wherein said main cover body is a one-piece body, said light emanating portion defining a plurality of said openings.

9. The lampshade assembly as claimed in claim **8**, wherein each of said mounting elements includes a U-shaped member secured to said light emanating portion, said U-shaped member having a bight portion and two opposite arms projecting from said bight portion, one of said arms being secured to said light emanating portion, the other one of said arms being connected to said shroud.

10. A lampshade assembly comprising:

a main cover body surrounding a receiving space and formed with a light emanating portion, said light emanating portion defining at least one opening; and

a reflector shroud mounted on said cover body, said shroud being disposed surroundingly about and being spaced apart from said light emanating portion to define a heat dissipating space wherein an inner surface of said shroud is coated with a heat resistant pigment layer.

11. The lampshade assembly as claimed in claim **10**, wherein said pigment layer is a fluorescent pigment.

* * * * *